

**FEBRUARY 2002:** Abnormally warm and dry conditions prevailed during the final month of the meteorological winter season across the Washington/Baltimore area. Monthly temperature departures between 3.8°F and 4.5°F were observed at the three major airports. There were 22 days with above-normal temperatures, including a daily record high of 77°F (34°F above normal) on the 1<sup>st</sup> at DCA. BWI and IAD also established daily record highs on the 1<sup>st</sup> with a high of 75°F at both locations. In addition, there were 6 days with 60°F+ highs at DCA. There were no major intrusions of Arctic air and as a result there were no days with highs at or below 32°F and no days with lows at or below 20°F at DCA.

Drought conditions continued to worsen across the Washington/Baltimore area as monthly precipitation totals of less than 0.50" were observed at most locations. In fact, it was the second driest February ever recorded in Washington (0.47") & at IAD (0.47") and the driest on record at BWI (0.36"). There were no precipitation events that produced more than 0.25" at any of the local airports. By the third week of the month, a drought warning (D2 -severe) was issued for most of the Washington/Baltimore area. Extreme drought conditions were reported in northern Maryland as water flow at Point of Rocks, MD was measured at only 21% of normal by month's end, according to press reports. In addition, water flow on major rivers such as the Potomac, Rappahannock, Shenandoah and Rapidan, were running between 27- 68% of normal at the end of February, according to press reports. Subnormal snowfall (0.5") was observed for the sixth consecutive February at DCA. In fact, there were only two days (4<sup>th</sup> and 7<sup>th</sup>) with measurable snowfall, with about a quarter of an inch of snow reported with each event at DCA. Only a trace of snow was observed at both BWI and IAD (the lowest February amount in more than ten years at IAD). Most cold fronts passed through the local area with little or no moisture, but often generated very windy conditions. In fact, DCA recorded a wind gust of 49 mph on the 11th, equaling their strongest gust in February since 1987.

### FEBRUARY 2002 WEATHER STATISTICS FOR THE WASHINGTON/BALTIMORE AREA:

Station Location	Temperatures (°F)					Extreme/Day		Precipitation (In)			
	AvMx	AvMn	AvgT	NmIT	DepNml	MaxT	MinT	Total	Norm	DepNml	Snow
National (DCA)	52.5	32.7	42.6	38.1	+4.5	77/1	32/5	0.47	2.63	-2.16	0.5
Baltimore (BWI)	51.1	27.4	39.2	35.5	+3.8	75/1	17/14	0.36	3.02	-2.66	T
Dulles (IAD)	51.6	26.1	38.8	34.8	+4.0	75/1	14/14	0.47	2.77	-2.30	T
Andrews AFB (ADW)	52.0	28.0	40.0	N/A	N/A	75/1	16/14	0.69	3.3	-2.6	T

**WINTER (DECEMBER-FEBRUARY) 2001-2002:** Winter was highlighted by abnormal warmth and very dry conditions across the Washington/Baltimore area. Seasonal temperature departures exceeded +5°F at the three major airports, producing the third warmest winter ever observed in Washington, second at BWI and third at IAD. There were 71 days (79%) with at or above normal temperatures, including 18 days when the mercury reached or exceeded 60°F at DCA. In addition, there was only one day (December 30<sup>th</sup>) when highs failed to top the freezing mark at DCA. The season commenced with abnormal warmth in December. Monthly temperatures averaged more than 6°F above normal at DCA, including 24 days with at or above normal temperatures and 6 days with 60°F+ highs. In contrast, the most prolonged period of cold weather during the winter occurred during the last week of December and into the first week of January. During this time, highs in the thirties were common across most of the local area. After the first week of January, periods of cold weather were infrequent and brief, usually lasting only a couple of days at a time. The result was monthly temperature departures exceeding +6°F in January and more than +3.5°F in February at the three major airports. Highs topped 60°F on five days in January and on six days in February at DCA. In addition, temperatures during the last 10 days of January averaged more than 15°F above normal at DCA and included daily record highs at IAD (68°F) on the 28<sup>th</sup> and at all three major airports on the 30<sup>th</sup> as highs soared into the seventies. The last month of meteorological winter featured above-normal temperatures across the local area. There were 22 days with at or above temperatures at DCA and daily record highs at all three major airports on the 1<sup>st</sup>. The abnormal January warmth combined with very mild weather in February yielded one of the warmest (7<sup>th</sup> overall) January-February periods on record in Washington.

Unusually dry conditions that commenced late last summer, continued unabated throughout the winter season, resulting in the second driest winter ever recorded in Washington (3<sup>rd</sup> at BWI and driest ever at IAD). Seasonal precipitation deficits topped 5 inches at the three major airports. There were 22 days with measurable precipitation, but only 2 days (Dec. 8<sup>th</sup> & Jan. 6<sup>th</sup>) with amounts exceeding 0.50". In addition, subnormal seasonal snowfall was observed across the local area once again. In fact, it was the 14<sup>th</sup> winter out of the last 15 with less than normal snowfall at DCA. The season commenced with subnormal December precipitation. In fact, monthly precipitation totals (under 2 inches) were only about 50% of normal at most locations. Two storms systems accounted for most of the monthly precipitation totals. On December 8<sup>th</sup>, about half an inch of rain fell on most locations. DCA recorded 0.57" on this day, marking the first daily precipitation total above 0.50" since August 23<sup>rd</sup>. On the December 10th-11th, just under 0.50" was observed at many locations. No snowfall was reported at any of the major airports during December. In fact, it was the 12th consecutive December with subnormal snowfall in Washington. Subnormal precipitation was observed across the region during the first month of 2002 with monthly totals generally less than two inches (between 40-60% of the normal) at most locations. In fact, it was the driest January since 1981 at both DCA & IAD. In addition, January marked the sixth consecutive month with below normal precipitation at DCA (fifth consecutive month with less than two inches), fifth consecutive at BWI and fourth consecutive at IAD. The first 1"+ snowfall of the season fell on January 19th with 2"-4" blanketing most of the local area. This snow event turned out to be the only significant one of the season across the local area. The final month of winter featured the driest weather of the season as less than 0.50" of precipitation was observed at most locations.

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Station Location	Temperatures (°F)					Extreme/Month-Day			Precipitation (In)			
	AvMx	AvMn	AvgT	NmIT	DepNml	MaxT	MinT	Total	Norm	DepNml	Snow	
National (DCA)	51.8	34.6	43.2	37.5	+5.7	77/1-30*	20/1-1	3.32	8.89	-5.57	3.2	
Baltimore (BWI)	50.7	29.6	40.2	34.8	+5.4	75/12-5*	15/12-31	4.28	9.84	-5.56	2.3	
Dulles (IAD)	50.8	28.8	39.8	34.1	+5.7	77/12-5	12/1-2	3.25	8.89	-5.64	2.6	
Andrews AFB (ADW)	51.1	30.6	41.1	N/A	N/A	79/12-5	12/12-31	4.15	9.3	-5.1	2.0	

Other Occurrences: \*February 1<sup>st</sup>.

### LOOKING AHEAD TO MARCH: The transitional month.

With the end of another winter our thoughts now turn to spring. Since March is the transitional month from winter to spring, it can be a month of extremes. Below is a list of some notable March climatological statistics for Washington since records began in 1871 (snowfall records began in 1888).

Temperature Extremes			Precipitation Extremes		
<b>Coldest:</b> 1885	<b>Avg. Temp.:</b> 34.5°F	<b>Dep. Nml.:</b> -12.7°F	<b>Wettest:</b> 1891	<b>Tot. Prec.:</b> 8.84"	<b>Dep. Nml.:</b> +5.67"
<b>Warmest:</b> 1921 & 1945	<b>Avg. Temp.:</b> 55.5°F	<b>Dep. Nml.:</b> +8.3°F	<b>Driest:</b> 1910	<b>Tot. Prec.:</b> 0.57"	<b>Dep. Nml.:</b> -2.60"
<b>Extreme Minimum:</b> 4°F (March 4, 1873)			<b>Snowiest:</b> 1914	<b>Tot. Snowfall:</b> 19.3"	<b>Dep. Nml.:</b> +17.7"
<b>Extreme Maximum:</b> 93°F (March 23, 1907)			<b>Most precipitation in one day (liquid):</b> 2.79" (March 9, 1881)		
<b>Most days with:</b> lows < 32°F: 24 (1960) ; highs > 90°F: 3 (1907)			<b>Most snowfall in one day:</b> 11.3" (March 29, 1942)		